

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	18	(US-4933743-\$ or US-5824599-\$ or US-6069068-\$ or US-6127258-\$ or US-6136682-\$ or US-6140231-\$ or US-6144096-\$ or US-6146993-\$ or US-6181012-\$ or US-6207222-\$ or US-6277263-\$ or US-6287954-\$ or US-6326305-\$ or US-6348732-\$ or US-6350678-\$ or US-6376368-\$ or US-6465867-\$ or US-6541860-\$).did.	USPAT	OR	OFF	2005/03/02 16:45
L2	180	farrar-paul-a.in.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2005/03/02 16:19
L3	1384	substrate and (via or opening)and seed and barrier and (dielectric or insulat\$4) and metal\$4 and angstrom	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2005/03/02 16:47
L4	1362	3 not (1 2)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2005/03/02 16:47
L5	100	4 and ("Hf" or hafnium) and ("Zr" or zirconium)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2005/03/02 16:47
L6	49	5 and (polyimide or polymer)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2005/03/02 16:48
L7	34	6 and (etch\$4 adj (barrier or stop))	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2005/03/02 17:01
L8	15	6 not 7	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2005/03/02 16:56
L9	10	((("5937320") or ("6103320") or ("6208016") or ("6245662") or ("6288442") or ("6358849") or ("6552432") or ("6614099") or ("6743716") or ("6756298"))).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	OFF	2005/03/02 17:01
S1	11	((("6436787") or ("6362012") or ("20020047153") or ("5940319") or ("6153443") or ("6197688") or ("6465867") or ("5741626") or ("6312874") or ("5821168") or ("6194304"))).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; IBM_TDB	OR	OFF	2004/08/27 12:59
S2	0	((("6436787") or ("6362012") or ("20020047153") or ("5940319") or ("6153443") or ("6197688") or ("6465867") or ("5741626") or ("6312874") or ("5821168") or ("6194304"))).PN.) and seed and (barrier or adhes\$4) and coper and aluminum	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 13:00
S3	3	((("6436787") or ("6362012") or ("20020047153") or ("5940319") or ("6153443") or ("6197688") or ("6465867") or ("5741626") or ("6312874") or ("5821168") or ("6194304"))).PN.) and seed and (barrier or adhes\$4) and copper and aluminum	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 13:00
S4	45	("2842438" "20010002333" "20020014646" "20020028552" "20020096768" "20020109233" "3954570" "4386116" "4394223" "4423547" "4565157" "4574095" "4762728" "4788082" "4847111" "4931410" "4962058" "4984459" "4996584" "5019531" "5034799" "5084412" "5100499" "5130274" "5158986" "5173442" "5231056" "5240878" "5243222" "5256205" "5334356" "5354712" "5371042" "5384284" "5413687" "5426330" "5442237" "5447887" "5470789" "5470801" "5506449" "5538922" "5539060" "5595937").pn.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 13:46

S5	48	("5609721" "5635253" "5654245" "5670420" "5674787" "5679608" "5681441" "5695810" "5719089" "5719410" "5739579" "5763953" "5780358" "5785570" "5792522" "5801098" "5814557" "5821168" "5824599" "5858877" "5891797" "5891804" "5895740" "5897370" "5907772" "5911113" "5925930" "5930669" "5932928" "5940733" "5948467" "5962923" "5972179" "5972804" "5976710" "5981350" "5985759" "5989623" "5994777" "6008117" "6015465" "6017820" "6030877" "6065424" "6069068" "6071810" "6100193" "6126989").pn.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 13:46
S6	37	("6136095" "6139699" "6140228" "6140234" "6143646" "6150261" "6153507" "6159769" "6171661" "6177350" "6183564" "6187656" "6190732" "6197688" "6207222" "6207553" "6207558" "6211049" "6211073" "6221763" "6232219" "6249056" "6265311" "6271592" "6284656" "6287954" "6323553" "6326303" "6359328" "6372622" "6376370" "6387542" "6399489" "6403481" "6420262" "6426289" "6429120").PN.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 13:46
S7	130	((("2842438" "20010002333" "20020014646" "20020028552" "20020096768" "20020109233" "3954570" "4386116" "4394223" "4423547" "4565157" "4574095" "4762728" "4788082" "4847111" "4931410" "4962058" "4984459" "4996584" "5019531" "5034799" "5084412" "5100499" "5130274" "5158986" "5173442" "5231056" "5240878" "5243222" "5256205" "5334356" "5354712" "5371042" "5384284" "5413687" "5426330" "5442237" "5447887" "5470789" "5470801" "5506449" "5538922" "5539060" "5595937").pn.) (("5609721" "5635253" "5654245" "5670420" "5674787" "5679608" "5681441" "5695810" "5719089" "5719410" "5739579" "5763953" "5780358" "5785570" "5792522" "5801098" "5814557" "5821168" "5824599" "5858877" "5891797" "5891804" "5895740" "5897370" "5907772" "5911113" "5925930" "5930669" "5932928" "5940733" "5948467" "5962923" "5972179" "5972804" "5976710" "5981350" "5985759" "5989623" "5994777" "6008117" "6015465" "6017820" "6030877" "6065424" "6069068" "6071810" "6100193" "6126989").pn.) (("6136095" "6139699" "6140228" "6140234" "6143646" "6150261" "6153507" "6159769" "6171661" "6177350" "6183564" "6187656" "6190732" "6197688" "6207222" "6207553" "6207558" "6211049" "6211073" "6221763" "6232219" "6249056" "6265311" "6271592" "6284656" "6287954" "6323553" "6326303" "6359328" "6372622" "6376370" "6387542" "6399489" "6403481" "6420262" "6426289" "6429120").PN.)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 13:46
S8	153	farrar-paul-a.in.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 15:09
S9	23	farrar-paul-a.in. and (seed adj layer) and via\$2 and barrier	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 14:01
S10	5	(farrar-paul-a.in. and (seed adj layer) and via\$2 and barrier) and ((seed adj layer) and via\$2 and barrier).clm.	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 13:54
S11	21	("2842438" "4762728" "4847111" "4962058" "5084412" "5130274" "5158986" "5173442" "5231056" "5654245" "5670420" "5763953" "5824599" "5891797" "5948467" "5994777" "6071810" "6140228" "6171661" "6197688" "6207222").PN.	USPAT	OR	ON	2004/08/27 13:54
S12	9	("4574095" "4789648" "4894260" "4985750" "5151168" "5183795" "5192581" "5240497" "5580668").PN.	USPAT	OR	ON	2004/08/27 13:59

S13	40	<p>((("2842438" "20010002333" "20020014646" "20020028552" "20020096768" "20020109233" "3954570" "4386116" "4394223" "4423547" "4565157" "4574095" "4762728" "4788082" "4847111" "4931410" "4962058" "4984459" "4996584" "5019531" "5034799" "5084412" "5100499" "5130274" "5158986" "5173442" "5231056" "5240878" "5243222" "5256205" "5334356" "5354712" "5371042" "5384284" "5413687" "5426330" "5442237" "5447887" "5470789" "5470801" "5506449" "5538922" "5539060" "5595937").pn.)</p> <p>((("5609721" "5635253" "5654245" "5670420" "5674787" "5679608" "5681441" "5695810" "5719089" "5719410" "5739579" "5763953" "5780358" "5785570" "5792522" "5801098" "5814557" "5821168" "5824599" "5858877" "5891797" "5891804" "5895740" "5897370" "5907772" "5911113" "5925930" "5930669" "5932928" "5940733" "5948467" "5962923" "5972179" "5972804" "5976710" "5981350" "5985759" "5989623" "5994777" "6008117" "6015465" "6017820" "6030877" "6065424" "6069068" "6071810" "6100193" "6126989").pn.)</p> <p>((("6136095" "6139699" "6140228" "6140234" "6143646" "6150261" "6153507" "6159769" "6171661" "6177350" "6183564" "6187656" "6190732" "6197688" "6207222" "6207553" "6207558" "6211049" "6211073" "6221763" "6232219" "6249056" "6265311" "6271592" "6284656" "6287954" "6323553" "6326303" "6359328" "6372622" "6376370" "6387542" "6399489" "6403481" "6420262" "6426289" "6429120").PN.)) and (seed adj layer) and via\$2 and barrier and via\$2 and substrate</p>	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 14:02
S14	34	<p>(((((2842438" "20010002333" "20020014646" "20020028552" "20020096768" "20020109233" "3954570" "4386116" "4394223" "4423547" "4565157" "4574095" "4762728" "4788082" "4847111" "4931410" "4962058" "4984459" "4996584" "5019531" "5034799" "5084412" "5100499" "5130274" "5158986" "5173442" "5231056" "5240878" "5243222" "5256205" "5334356" "5354712" "5371042" "5384284" "5413687" "5426330" "5442237" "5447887" "5470789" "5470801" "5506449" "5538922" "5539060" "5595937").pn.)</p> <p>((("5609721" "5635253" "5654245" "5670420" "5674787" "5679608" "5681441" "5695810" "5719089" "5719410" "5739579" "5763953" "5780358" "5785570" "5792522" "5801098" "5814557" "5821168" "5824599" "5858877" "5891797" "5891804" "5895740" "5897370" "5907772" "5911113" "5925930" "5930669" "5932928" "5940733" "5948467" "5962923" "5972179" "5972804" "5976710" "5981350" "5985759" "5989623" "5994777" "6008117" "6015465" "6017820" "6030877" "6065424" "6069068" "6071810" "6100193" "6126989").pn.)</p> <p>((("6136095" "6139699" "6140228" "6140234" "6143646" "6150261" "6153507" "6159769" "6171661" "6177350" "6183564" "6187656" "6190732" "6197688" "6207222" "6207553" "6207558" "6211049" "6211073" "6221763" "6232219" "6249056" "6265311" "6271592" "6284656" "6287954" "6323553" "6326303" "6359328" "6372622" "6376370" "6387542" "6399489" "6403481" "6420262" "6426289" "6429120").PN.)) and (seed adj layer) and via\$2 and barrier and via\$2 and substrate) not farrar-paul-a.in.</p>	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 14:02

S15	33	(((((("2842438" "20010002333" "20020014646" "20020028552" "20020096768" "20020109233" "3954570" "4386116" "4394223" "4423547" "4565157" "4574095" "4762728" "4788082" "4847111" "4931410" "4962058" "4984459" "4996584" "5019531" "5034799" "5084412" "5100499" "5130274" "5158986" "5173442" "5231056" "5240878" "5243222" "5256205" "5334356" "5354712" "5371042" "5384284" "5413687" "5426330" "5442237" "5447887" "5470789" "5470801" "5506449" "5538922" "5539060" "5595937" .pn.) ((("5609721" "5635253" "5654245" "5670420" "5674787" "5679608" "5681441" "5695810" "5719089" "5719410" "5739579" "5763953" "5780358" "5785570" "5792522" "5801098" "5814557" "5821168" "5824599" "5858877" "5891797" "5891804" "5895740" "5897370" "5907772" "5911113" "5925930" "5930669" "5932928" "5940733" "5948467" "5962923" "5972179" "5972804" "5976710" "5981350" "5985759" "5989623" "5994777" "6008117" "6015465" "6017820" "6030877" "6065424" "6069068" "6071810" "6100193" "6126989" .pn.) ((("6136095" "6139699" "6140228" "6140234" "6143646" "6150261" "6153507" "6159769" "6171661" "6177350" "6183564" "6187656" "6190732" "6197688" "6207222" "6207553" "6207558" "6211049" "6211073" "6221763" "6232219" "6249056" "6265311" "6271592" "6284656" "6287954" "6323553" "6326303" "6359328" "6372622" "6376370" "6387542" "6399489" "6403481" "6420262" "6426289" "6429120").PN.)) and (seed adj layer) and via\$2 and barrier and via\$2 and substrate) not farrar-paul-a.in.) and (insulat\$4 or oxide or dielectric)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 14:03
S16	17	(((((("2842438" "20010002333" "20020014646" "20020028552" "20020096768" "20020109233" "3954570" "4386116" "4394223" "4423547" "4565157" "4574095" "4762728" "4788082" "4847111" "4931410" "4962058" "4984459" "4996584" "5019531" "5034799" "5084412" "5100499" "5130274" "5158986" "5173442" "5231056" "5240878" "5243222" "5256205" "5334356" "5354712" "5371042" "5384284" "5413687" "5426330" "5442237" "5447887" "5470789" "5470801" "5506449" "5538922" "5539060" "5595937" .pn.) ((("5609721" "5635253" "5654245" "5670420" "5674787" "5679608" "5681441" "5695810" "5719089" "5719410" "5739579" "5763953" "5780358" "5785570" "5792522" "5801098" "5814557" "5821168" "5824599" "5858877" "5891797" "5891804" "5895740" "5897370" "5907772" "5911113" "5925930" "5930669" "5932928" "5940733" "5948467" "5962923" "5972179" "5972804" "5976710" "5981350" "5985759" "5989623" "5994777" "6008117" "6015465" "6017820" "6030877" "6065424" "6069068" "6071810" "6100193" "6126989" .pn.) ((("6136095" "6139699" "6140228" "6140234" "6143646" "6150261" "6153507" "6159769" "6171661" "6177350" "6183564" "6187656" "6190732" "6197688" "6207222" "6207553" "6207558" "6211049" "6211073" "6221763" "6232219" "6249056" "6265311" "6271592" "6284656" "6287954" "6323553" "6326303" "6359328" "6372622" "6376370" "6387542" "6399489" "6403481" "6420262" "6426289" "6429120").PN.)) and (seed adj layer) and via\$2 and barrier and via\$2 and substrate) not farrar-paul-a.in.) and (insulat\$4 or oxide or dielectric) and (polymer or polyimide)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 14:04
S17	26	("2842438" "3954570" "4386116" "4788082" "4931410" "4962058" "5100499" "5158986" "5173442" "5240878" "5256205" "5334356" "5470789" "5470801" "5506449" "5635253" "5659193" "5674787" "5679608" "5681441" "5695810" "5717236" "5785570" "5913147" "5982040" "6107657").PN.	USPAT	OR	ON	2004/08/27 14:05
S18	3	"6465867"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 15:58
S19	6	("6057237" "6136682" "6140231" "6144096" "6146993" "6348732").PN.	USPAT	OR	ON	2004/08/27 15:09
S20	2	("6136682" "6181012").PN.	USPAT	OR	ON	2004/08/27 15:11
S21	1	"6465867".URPN.	USPAT	OR	ON	2004/08/27 15:12

S22	2	"6348732".URPN.	USPAT	OR	ON	2004/08/27 15:12
S23	6	("4933743" "4933754" "6127258" "6326305" "6348732" "6417566").PN.	USPAT	OR	ON	2004/08/27 15:13
S24	2	("6136682" "6181012").PN.	USPAT	OR	ON	2004/08/27 15:14
S25	2	"6348732".URPN.	USPAT	OR	ON	2004/08/27 15:15
S26	57	substrate and (conductor adj core) and (channel adj stop) and (barrier with adhesion) and (seed adj layer)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 15:58
S27	57	(substrate and (conductor adj core) and (channel adj stop) and (barrier with adhesion) and (seed adj layer)) and (dielectric or insulat\$4) and (contact\$4 or plug) and copper	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 15:59
S28	57	((substrate and (conductor adj core) and (channel adj stop) and (barrier with adhesion) and (seed adj layer)) and (dielectric or insulat\$4) and (contact\$4 or plug) and copper) not (((("2842438" "20010002333" "20020014646" "20020028552" "20020096768" "20020109233" "3954570" "4386116" "4394223" "4423547" "4565157" "4574095" "4762728" "4788082" "4847111" "4931410" "4962058" "4984459" "4996584" "5019531" "5034799" "5084412" "5100499" "5130274" "5158986" "5173442" "5231056" "5240878" "5243222" "5256205" "5334356" "5354712" "5371042" "5384284" "5413687" "5426330" "5442237" "5447887" "5470789" "5470801" "5506449" "5538922" "5539060" "5595937").pn.) (("5609721" "5635253" "5654245" "5670420" "5674787" "5679608" "5681441" "5695810" "5719089" "5719410" "5739579" "5763953" "5780358" "5785570" "5792522" "5801098" "5814557" "5821168" "5824599" "5858877" "5891797" "5891804" "5895740" "5897370" "5907772" "5911113" "5925930" "5930669" "5932928" "5940733" "5948467" "5962923" "5972179" "5972804" "5976710" "5981350" "5985759" "5989623" "5994777" "6008117" "6015465" "6017820" "6030877" "6065424" "6069068" "6071810" "6100193" "6126989").pn.) (("6136095" "6139699" "6140228" "6140234" "6143646" "6150261" "6153507" "6159769" "6171661" "6177350" "6183564" "6187656" "6190732" "6197688" "6207222" "6207553" "6207558" "6211049" "6211073" "6221763" "6232219" "6249056" "6265311" "6271592" "6284656" "6287954" "6323553" "6326303" "6359328" "6372622" "6376370" "6387542" "6399489" "6403481" "6420262" "6426289" "6429120").PN.)) farrar-paul-a.in.)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 16:14
S29	14	("6083835" "6100184" "6114243" "6130161" "6157081" "6159845" "6258713" "6261950" "6274499" "6281127" "6288448" "6309970" "6323135" "6350678").PN.	USPAT	OR	ON	2004/08/27 16:03
S30	10	("5483568" "5772780" "5804513" "6103625" "6123088" "6143662" "6191027" "6200901" "6221775" "6232231").PN.	USPAT	OR	ON	2004/08/27 16:06
S31	4	"6326305".URPN.	USPAT	OR	ON	2004/08/27 16:06
S32	14	("6083835" "6100184" "6114243" "6130161" "6157081" "6159845" "6258713" "6261950" "6274499" "6281127" "6288448" "6309970" "6323135" "6350678").PN.	USPAT	OR	ON	2004/08/27 16:08
S33	3	("5928962" "6227949" "6235071").PN.	USPAT	OR	ON	2004/08/27 16:09
S34	3	"6350678".URPN.	USPAT	OR	ON	2004/08/27 16:09
S35	40	("2842438" "4565157" "4762728" "4847111" "4962058" "5084412" "5130274" "5158986" "5173442" "5231056" "5240878" "5371042" "5413687" "5609721" "5654245" "5670420" "5763953" "5824599" "5891797" "5948467" "5962923" "5972179" "5994777" "6017820" "6065424" "6015465" "6071810" "6136095" "6136699" "6140228" "6143646" "6153507" "6171661" "6177350" "6183564" "6190732" "6197688" "6207222" "6265311" "6271592").PN.	USPAT	OR	ON	2004/08/27 16:13

S36	13	"6277263"	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/27 16:14
S37	17	(US-6465867-\$ or US-6207222-\$ or US-5824599-\$ or US-6287954-\$ or US-6069068-\$ or US-6348732-\$ or US-6146993-\$ or US-6140231-\$ or US-6144096-\$ or US-6136682-\$ or US-6181012-\$ or US-6541860-\$ or US-6326305-\$ or US-6127258-\$ or US-4933743-\$ or US-6350678-\$ or US-6277263-\$).did.	USPAT	OR	OFF	2004/08/30 17:02
S38	3	((US-6465867-\$ or US-6207222-\$ or US-5824599-\$ or US-6287954-\$ or US-6069068-\$ or US-6348732-\$ or US-6146993-\$ or US-6140231-\$ or US-6144096-\$ or US-6136682-\$ or US-6181012-\$ or US-6541860-\$ or US-6326305-\$ or US-6127258-\$ or US-4933743-\$ or US-6350678-\$ or US-6277263-\$).did.) and liner	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/30 17:07
S39	2	(titanium adj silicide adj liner) and (metallization) and via\$2 and (insulat\$4 and substrate)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/30 17:09
S40	2	titanium adj silicide adj liner	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/30 17:09
S41	17	silicide adj liner	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/30 17:09
S42	15	(silicide adj liner) not (titanium adj silicide adj liner)	US-PGPUB; USPAT; EPO; JPO; IBM_TDB	OR	ON	2004/08/30 17:09